

SOUTHWEST BORDER SECURITY
TECHNOLOGY IMPROVEMENT ACT OF 2020

R E P O R T

OF THE

COMMITTEE ON HOMELAND SECURITY AND
GOVERNMENTAL AFFAIRS
UNITED STATES SENATE

TO ACCOMPANY

S. 4224

TO REQUIRE THE SECRETARY OF HOMELAND SECURITY TO
ASSESS TECHNOLOGY NEEDS ALONG THE SOUTHERN BORDER
AND DEVELOP A STRATEGY FOR BRIDGING SUCH GAPS



DECEMBER 14, 2020.—Ordered to be printed

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**SOUTHWEST BORDER SECURITY TECHNOLOGY
IMPROVEMENT ACT OF 2020**

DECEMBER 14, 2020.—Ordered to be printed

Mr. JOHNSON, from the Committee on Homeland Security and
Governmental Affairs, submitted the following

R E P O R T

[To accompany S. 4224]

The Committee on Homeland Security and Governmental Affairs, to which was referred the bill (S. 4224) to require the Secretary of Homeland Security to assess technology needs along the Southern border and develop a strategy for bridging such gaps, having considered the same, reports favorably thereon with an amendment (in the nature of a substitute) and recommends that the bill, as amended, do pass.

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I. PURPOSE AND SUMMARY

The purpose of S. 4224, the Southwest Border Security Technology Improvement Act of 2020, is to analyze the technology used along the southwest border and provide Congress a better understanding of how the Department of Homeland Security (DHS or Department) makes technology decisions and what other technological solutions may be needed to improve border security, both at ports of entry and between ports of entry. If enacted, this bill will provide a comprehensive assessment of available technological advancements and how they can be better leveraged to address DHS'

needs with respect to combating illegal activity and facilitating lawful trade and travel.

II. BACKGROUND AND THE NEED FOR LEGISLATION

The nation’s border with Mexico spans almost 2,000 miles, and is protected by the U.S. Customs and Border Protection (CBP), which oversees nine U.S. Border Patrol sectors and four Office of Field Operations offices along the varied and rugged terrain of the southwest border.^{1A}¹ In 1993, Sandia National Laboratories identified at least ten distinct terrain categories along the southwest border.^{1A}² Each area of terrain requires a different enforcement strategy, including surveillance technology, physical barriers, and personnel.^{1A}³ According to CBP Division Chief Raleigh Leonard, “We have yet to discover that one piece of technology [sic] is a one-size-fits-all solution.”⁴ Instead, the U.S. government must determine which technologies work best along each area of the diverse terrain, as well as at ports of entries, which provide CBP unique challenges with the need to manage the flow of trade while combatting drug smuggling and other crimes.

Previous CBP commissioners have acknowledged that the key to securing any segment of the southwest border requires solutions comprised of the appropriate mix of personnel, infrastructure, and technology. In April 2017, then-Acting Commissioner David Aguilar told the Committee that, “[i]nfrastructure, technology and personnel are critical aspects of the solution that will ensure enhanced control over the entire border.”⁵ S. 4224 focuses on one key aspect of this three-pronged border security solution: technology.

CBP Deputy Commissioner Robert Perez recently stated that CBP processes more than a million travelers per day on average and “technology is on the front line with our agents and officers 24/7, so it is critical that we have the latest and greatest tools in our toolbox.”⁶ In recognition of the need to ensure that CBP has the necessary resources to execute its border security mission and acquire additional technological capabilities, the President’s Fiscal Year 2021 Budget request included “\$2.3 billion in high priority investments in border security technology, infrastructure, and equipment to help CBP prevent, detect, and interdict illegal border

¹*Border Wall System—Frequently Asked Questions*, U.S. Customs & Border Prot., <https://www.cbp.gov/border-security/border-wall/border-wall-system-frequently-asked-questions#text=What%20is%20the%20length%20of,Mexico%20is%20approximately%201%2C954%20miles.>; *Border Patrol Sectors*, U.S. Customs & Border Prot., <https://www.cbp.gov/border-security/along-us-borders/border-patrol-sectors>; *Southwest Border Inadmissibles by Field Office Fiscal Year 2020*, U.S. Customs & Border Prot., <https://www.cbp.gov/newsroom/stats/sw-border-migration/fo-sw-border-inadmissibles>.

²Sandia Nat’l Laboratories, *Systematic Analysis of the Southwest Border*, Volume 1 at 14 (1993), <https://www.dhs.gov/sites/default/files/publications/systematic-analysis-of-southwest-border-vol-1.pdf>.

³Dep’t of Homeland Sec., Office of Inspector Gen., OIG 09–56, *Progress in Addressing Secure Border Initiative Operational Requirements and Constructing the Southwest Border Fence* (2009), <https://www.oig.dhs.gov/assets/Mgmt/OIGApr09.pdf>.

⁴Eric Blum, *Further Reflection*, U.S. Customs & Border Prot., <https://www.cbp.gov/frontline/frontline-june-az-technology>; (last visited July 27, 2020).

⁵*Fencing Along the Southwest Border: Hearing Before the S. Comm. on Homeland Sec. & Governmental Affairs*, 115th Cong. 2 (2017) (statement of David Aguilar, Former Acting Commissioner, U.S. Customs and Border Protection).

⁶Newsroom Spotlight, U.S. Customs & Border Protection, *CBP Leaders Talk Technology at Texas Border Security Expo* (Mar. 13, 2020), <https://www.cbp.gov/newsroom/spotlights/cbp-leaders-talk-technology-texas-border-security-expo>.

crossings.”⁷ In March 2020, Acting Commissioner Mark Morgan stated that “everyday more miles of new border wall system and technologies are being deployed to the border.”⁸ As CBP increases its investments in technological solutions along the southwest border, it is also important that DHS analyze the gaps and identify the needs along our southwest border and share that information with Congress.

This is also demonstrated by several DHS Office of Inspector General (OIG) and Government Accountability Office (GAO) reports that suggest DHS could improve its technology development and deployment.⁹ According to one report from DHS OIG, “[The Science & Technology Directorate] S&T did not fully comply with requirements of the *Homeland Security Act of 2002*, as amended, by not effectively coordinating and integrating department-wide [research and development] R&D activities.”¹⁰ The report also stated, “S&T did not effectively gather, track, and manage data on the Department’s R&D gaps and activities because the tools it had to capture the data were redundant, and S&T had not developed policies and procedures for integrating the data from them into a single, comprehensive database.”¹¹ This legislation will assist DHS leadership in tackling such challenges by improving their ability to prioritize technology gaps.

CBP’s increased investments in technological solutions to enhance its border security operations along the southwest border demonstrate the need for a thorough assessment of the current and future technological needs. S. 4224 requires DHS to conduct an analysis of technology gaps and needs along the southwest border, including an assessment of technology used to preventing terrorism, combatting illegal activity, and facilitating legal trade and travel, and report on the findings of this analysis to Congress. The bill also requires DHS to analyze technology used at ports of entry and between the ports including manned and unmanned aerial systems, surveillance technology, non-intrusive inspection technology, tunnel detection technology, and communications equipment. As part of this analysis, DHS is required to assess its ongoing border security technology development efforts at CBP, the S&T, and other operational components, and consider formal departmental requirements that examine border security threats and challenges. Additionally, the bill requires DHS to consider migration trends,

⁷*Strengthening Border Security and Immigration Enforcement*, White House, <https://www.whitehouse.gov/wp-content/uploads/2020/02/FY21-Fact-Sheet-Immigration-Border-Security.pdf> (last visited July 27, 2020).

⁸*Telephonic Press Briefing with Mark A. Morgan, Acting Commissioner of U.S. Customs & Border Protection*, U.S. Dep’t of State (Mar. 12, 2020), <https://www.state.gov/telephonic-press-briefing-with-mark-a-morgan-acting-commissioner-of-u-s-customs-and-border-protection/>.

⁹See e.g., Dep’t of Homeland Sec., Office of Inspector General, OIG–19–59, *S&T Is Not Effectively Coordinating Research & Development Efforts Across DHS* (Sept. 18, 2019), <https://www.oig.dhs.gov/sites/default/files/assets/2019-09/OIG-19-59-Sep19.pdf>; U.S. Gov. Accountability Office, GAO–14–368, *Arizona Border Surveillance Technology Plan: Additional Actions Needed to Strengthen Management and Assess Effectiveness* (Mar. 3, 2014), <https://www.gao.gov/mobile/products/GAO-14-368>; U.S. Gov. Accountability Office, GAO–20–48G, *Technology Readiness Assessment Guide: Best Practices for Evaluating the Readiness of Technology for Use in Acquisition Programs and Projects* (Jan. 7, 2020), <https://www.gao.gov/mobile/products/GAO-20-48G>; U.S. Gov. Accountability Office, GAO–17–177, *Bioforensics: DHS Needs to Conduct a Formal Capability Gap Analysis to Better Identify and Address Gaps* (Jan. 11, 2017), <https://www.gao.gov/mobile/products/GAO-17-177>; U.S. Gov. Accountability Office, GAO–14–865T, *Department of Homeland Security: Actions Needed to Strengthen Management of Research and Development* (Sept. 9, 2014), <https://www.gao.gov/mobile/products/GAO-14-865T>.

¹⁰OIG–19–59, *What We Found*, *supra* note 9.

¹¹*Id.*

projected staffing needs, challenges faced by DHS employees, cooperation needs among border communities and Mexican partners, privacy implications in the deployment of technology, the needs to assist with search and rescue efforts of individuals in distress along the southwest border, and recent technological advancements that could improve border security. The report will help Congress better understand how DHS makes decisions related to border security and associated technology investments.

III. LEGISLATIVE HISTORY

Senator Kyrsten Sinema (D–AZ) introduced S. 4224, the Southwest Border Security Technology Improvement Act of 2020, on July 20, 2020, with Senator John Cornyn (R–TX). Senator James Lankford (R–OK) joined as a co-sponsor on July 21, 2020. The bill was referred to the Committee on Homeland Security and Governmental Affairs.

The Committee considered S. 4224 at a business meeting on July 22, 2020. During the business meeting, a substitute amendment was offered by Senator Sinema and adopted by unanimous consent. The substitute amendment includes minor technical changes, including changing the frequency of reports to Congress. The bill, as amended, was ordered reported favorably *en bloc* by voice vote. Senators present for the *en bloc* vote on the amendment and bill as amended were: Johnson, Portman, Paul, Lankford, Romney, Scott, Enzi, Hawley, Peters, Carper, Hassan, Harris and Rosen.

IV. SECTION-BY-SECTION ANALYSIS OF THE BILL, AS REPORTED

Section 1. Short title

This section established that the bill may be cited as the “Southwest Border Security Technology Improvement Act of 2020.”

Section 2. Definitions

This section provides definitions for the terms “Appropriate Congressional Committee,” “Department,” “Secretary,” and “Southwest Border”.

Section 3. Southern border technology needs analysis and updates

Subsection (a) requires DHS to submit a technology needs analysis to Congress within one year of enactment of the bill.

Subsection (b) lays out the contents required to be analyzed by DHS in the report required under subsection (a). This includes technology to prevent terrorism, combat illegal cross-border activity, and to facilitate trade and travel. This subsection requires DHS to analyze specific technologies such as manned aircraft systems, unmanned aerial systems, surveillance technology, non-intrusive inspection technology, tunnel detection technology, communications equipment, and other technologies. Additionally, this subsection provides that DHS is to assess how new technologies will interact with the Department’s mission, enhance the safety of personnel, improve border security, and reduce technology gaps. The analysis is also to include an evaluation of ongoing border security technology efforts by component, information technology, barriers and infrastructure, and any currently deployed or new technologies that

would reasonably allow DHS to achieve operational control and situational awareness of the southwest border.

Subsection (c) requires that DHS update its analysis and submit a report on the updated analysis to appropriate congressional committees biannually for 6 years, beginning two years following the initial report. Additionally, this subsection requires that each update include a plan for how DHS will meet the border security technology needs and gaps it identified.

Subsection (d) lays out specific requirements for what DHS must consider in its analysis and updates. This includes examining the sufficiency of deployed and necessary technologies, department requirements, trends in migration, projected staffing, documentation examining current border security threats and challenges, cooperation with other government and international partners, privacy implications, the effect of any public health emergencies that impact DHS operations, and the Department's search and rescue humanitarian mission.

Subsection (e) provides that the analysis and updates should be unclassified but may also include classified portions if necessary.

V. EVALUATION OF REGULATORY IMPACT

Pursuant to the requirements of paragraph 11(b) of rule XXVI of the Standing Rules of the Senate, the Committee has considered the regulatory impact of this bill and determined that the bill will have no regulatory impact within the meaning of the rules. The Committee agrees with the Congressional Budget Office's statement that the bill contains no intergovernmental or private-sector mandates as defined in the Unfunded Mandates Reform Act (UMRA) and would impose no costs on state, local, or tribal governments.

VI. CONGRESSIONAL BUDGET OFFICE COST ESTIMATE

CBO failed to provide the Committee with a cost estimate in time for the final reporting deadline of the 116th Congress.

VII. CHANGES IN EXISTING LAW MADE BY THE BILL, AS REPORTED

Because S. 4224 would not repeal or amend any provision of current law, it would make no changes in existing law within the meaning of clauses (a) and (b) of paragraph 12 of rule XXVI of the Standing Rules of the Senate.